

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

FEB 2 6 2007

REPLY TO THE ATTENTION OF:

AE-17J

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

John A. Thomas Plant Manager GM Powerfrain Division 26427 State Route 281 East Defiance, OH 43512-0070

Re: Finding and Notice of Violation at GM Powertrain Division, Defiance, Ohio

Dear Mr. Thomas:

This is to advise you that the United States Environmental Protection Agency (U.S. EPA) has determined that GM Powertrain Division (GM) at 26427 State Route 281 East, Defiance, Ohio (facility) is in violation of the Clean Air Act (CAA) and associated State pollution control requirements. A list of the requirements violated is provided below. We are today issuing to you a Finding of Violation and Notice of Violation (FOV/NOV) for these violations.

Title I, Part C of the CAA requires that all State Implementation Plan (SIP) permit programs contain rules regulating the construction and modification of major stationary sources in areas that have achieved attainment with the National Ambient Air Quality Standards (NAAQS). These rules are known as Prevention of Significant Deterioration (PSD). Under PSD rules, any major stationary source must obtain a preconstruction permit prior to commencing construction on any modification, if the modification is major in that it will result in a significant net increase in emissions of a regulated pollutant, and if the source is located in an area which has achieved the NAAQS for that pollutant. All preconstruction permits issued to sources subject to PSD must require (1) the application of Best Available Control Technology (BACT) and (2) a demonstration that the proposed modification does not cause or contribute to a violation of the NAAQS or cause any other significant deterioration of air quality. The State of Ohio has incorporated PSD rules into its SIP.

Section 608 of the CAA requires the Administrator of U.S. EPA to promulgate regulations establishing standards and requirements regarding the use and disposal of "Class I" and "Class II" ozone-depleting substances. In accordance with Section 608 of the CAA, U.S. EPA promulgated regulations at 40 C.F.R. Part 82, Subpart F, applicable to recycling and emissions reduction of ozone-depleting substances.

U.S. EPA finds that GM's facility violated the above listed CAA rules and regulations. Since GM's facility is subject to applicable requirements under the CAA that are not listed in its Title V permit, it has also violated Title V of the CAA and its associated regulations which require that all CAA applicable requirements be incorporated into that source's Title V permit.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by GM to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the FOV/NOV.

Before we decide which enforcement option is appropriate, Section 113 of the CAA provides you with the opportunity to request a conference with us about the violations alleged in the FOV/NOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The U.S. EPA contacts in this matter are Sheila Desai and Julie Morris. You may call them at (312) 353-4150 and (312) 886-0863, respectively, if you wish to request a conference. U.S. EPA hopes that this FOV/NOV will encourage GM's compliance with the requirements of the Clean Air Act.

Sincerely yours,

Stephen Rothblatt, Director Air and Radiation Division

Enclosure

cc: Robert Hodanbosi, Chief

Division of Air Pollution Control Ohio Environmental Agency

Don Waltermeyer, APC Supervisor Northwest District Office Ohio Environmental Protection Agency

United States Environmental Protection Agency Region 5

IN THE MATTER OF:)
GM Powertrain Division Defiance, Ohio) FINDING OF VIOLATION and NOTICE OF VIOLATION
Proceedings Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401 et seq.) EPA-5-07-OH-07)
42 C.B.C. 33 7 101 of bod.)

FINDING AND NOTICE OF VIOLATION

GM Powertrain Division (you or GM) owns and operates an iron and aluminum foundry at 26427 State Route 281 East, Defiance, Ohio (facility).

United States Environmental Protection Agency (U.S. EPA) is sending this Finding of Violation and Notice of Violation (FOV/NOV or Notice) to you because you conducted a major modification at your facility in Defiance, Ohio, without obtaining a PSD permit as required by Prevention of Significant Deterioration (PSD) rules. Such a PSD permit would have required the installation and continuous operation of Best Available Control Technology (BACT) for control of lead (Pb) on the 130 ton electric induction furnace (P349). The underlying statutory and regulatory requirements include provisions of the Clean Air Act (the Act or CAA), its implementing regulations and the Ohio State Implementation Plan (Ohio SIP). This Notice is also for failing to timely repair leaks of ozone-depleting substances from industrial process cooling equipment and comfort-cooling equipment as required at 40 C.F.R. Part 82, Subpart F.

Section 113 of the Act provides you with the opportunity to request a conference with us to discuss the violations alleged in the FOV/NOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

Explanation of Violations

1. The following provisions of the CAA, its implementing regulations and the Ohio SIP are relevant to this FOV/NOV:

Prevention of Significant Deterioration

a. Part C of Title I of the CAA, 42 U.S.C. §§ 7470 – 7479, and the PSD regulations implementing Part C, at 40 C.F.R. § 52.21, prohibit a major stationary source from constructing a modification without first obtaining a PSD permit, if the modification is major in that it will result in a significant net increase in emissions

of a regulated pollutant, and if the source is located in an area which has achieved the National Ambient Air Quality Standards (NAAQS) for that pollutant. Part C and its implementing regulations further require that a source subject to PSD regulations install BACT.

- b. 40 C.F.R. § 52.21(b) (1) (i) (a) defines a "major stationary source" as any stationary source within one of 28 source categories which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the CAA. Secondary metal production plants are included among the 28 source categories.
- c. 40 C.F.R. § 52.21(b) (2) (1) defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under CAA.
- d. 40 C.F.R. § 52.21(b) (3) (1) defines "net emissions increase" as "the amount by which the sum of the following exceeds zero:
 - i. Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
 - ii. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable."
- e. In reference to Pb, 40 C.F.R. § 52.21(b) (23) (1) defines significant net emissions increase as any increase in Pb of 0.6 tons or more per year.
- f. 40 C.F.R. § 52.21(n) requires any applicant for a permit to modify a stationary source to provide all relevant information to allow the permitting authority to perform an analysis or make the determination required in order to issue the appropriate permit.
- 2. The following provisions of the CAA and its implementing regulations are relevant to this FOV/NOV:

Requirements for Ohio SIP Permits to Install

a. Permit to Install (PTI) rules in the Ohio SIP at OAC Rule 3745-31-02(A) require any person that installs a new source of air pollutants or modifies an air containment source to first obtain a permit to install from the Ohio Environmental Protection Agency (Ohio EPA).

Requirements for Title V Operating Permits

b. Title V of the CAA establishes an operating permit program for major sources. The purpose of Title V is to ensure that all "applicable requirements" for compliance with the CAA, including PSD requirements, are collected in one place.

- c. The Title V permit program requires that each Title V permit include enforceable emission limitations and such other conditions as are necessary to assure compliance with "applicable requirements" of the CAA and the requirements of the applicable SIP. "Applicable requirements" include any applicable PSD requirements.
- d. Under Title V, any owner or operator of a source subject to the Title V program is required to submit a timely and complete permit application that contains information sufficient to determine the applicability of any applicable requirements (including any requirement to meet BACT pursuant to PSD), certifies compliance with all applicable requirements, provides information that may be necessary to determine the applicability of other applicable requirements of the CAA and contains a compliance plan for all applicable requirements for which the source is not in compliance.
- e. Under Title V, any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application is required to promptly submit such supplementary facts or corrected information upon becoming aware of such failure or incorrect submittal.
- f. Title V program requirements are codified at Section 503 of the CAA, 42 U.S.C. 7661b, with implementing regulations at 40 C.F.R. Part 70. Ohio's Title V permit program is codified at OAC Rule 3745-77.

Requirements for Ozone Depleting Substances

g. GM is subject to the regulations for the Protection of Stratospheric Ozone located in 40 C.F.R. Part 82, Subpart F. The Subpart F regulations contain Recycling and Emissions Reduction requirements for ozone depleting substances. The regulations in this Subpart that apply to GM include:

Ozone Depleting Substances-Industrial Units

- i. The Subpart F regulations at 40 C.F.R. § 82.156(i)(2) require that an owner or operator of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period. Repairs must bring annual leak rates to below 35 percent during a twelve month period.
- ii. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(9), require that owners or operators of industrial process refrigeration equipment must repair leaks pursuant to 40 C.F.R. § 82.156(i)(2) within 30 days after discovery of the leak.

- iii. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(3), require that an owner or operator of industrial process refrigeration equipment conduct an initial verification test at the conclusion of the repair efforts.
- iv. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(3), require that an owner or operator of industrial process refrigeration equipment conduct a follow-up verification test within 30 days after the initial verification test.
- v. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(6), state that an owner or operator of industrial process refrigeration equipment must develop a one-year retrofit and retirement plan within 30 days of discovering the exceedance of the applicable leak rate or within 30 days of a failed follow-up verification test. The plan must be dated and kept at the site of the appliance.
- vi. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(3)(ii), require that an owner or operator of industrial process refrigeration equipment must retrofit or retire such equipment within one year of failing the follow-up verification test.
- vii. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(3)(iii), require that an owner or operator of industrial process refrigeration equipment that fails a follow-up verification test must notify U.S. EPA within 30 days of the failed follow-up verification test.

Ozone Depleting Substances-Comfort Cooling Units

- viii. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(5), require that owners of refrigeration equipment normally containing more than 50 pounds of refrigerant ensure that repairs of leaking appliances bring the annual leak rate to below 15 percent.
- ix. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(6), require that owners of refrigeration equipment normally containing more than 50 pounds of refrigerant develop a one-year retrofit and retirement plan for leaking refrigeration units within thirty days of discovering the exceedance of the applicable leak rate.
- x. The Subpart F regulations, at 40 C.F.R. § 82.156(i)(6), require that owners of refrigeration equipment normally containing more than 50 pounds of refrigerant retrofit or retire a leaking refrigeration unit within one year of discovering the exceedance of the applicable leak rate.
- xi. The Subpart F regulations, at 40 C.F.R. § 82.166(k), require that owners of refrigeration equipment normally containing more than 50 pounds of

refrigerant keep service records documenting the date and type of service, as well as the quantity of refrigerant added.

Factual Background

3. On or about 1993, GM installed a 130 Ton Electric Induction Furnace (P349). As a result of the installation, Pb emissions significantly increased.

Prevention of Significant Deterioration

- 4. The change described in Paragraph 2 increased emissions of Pb greater than the significance level of 0.6 tons per year at 40 C.F.R. § 52.21(b) (23) (i) at the GM facility. Therefore, the change resulted in a "major modification", as defined in 40 C.F.R. § 52.21(b) (2), at a "major stationary source", as defined in 40 C.F.R. § 52.21(b) (1), triggering the requirement to (1) obtain a PSD PTI, (2) apply BACT on P349, and (3) demonstrate that the proposed change did not cause a significant deterioration in air quality.
- 5. GM continuously violates PSD rules at 40 C.F.R. § 52.21(i) through (r) because it continues to operate its electric induction furnace without: (1) a PSD PTI; (2) BACT control equipment; and (3) demonstrating that the change described in Paragraph 2 did not cause a significant deterioration in air quality.

SIP Permits to Install

6. GM continuously violates OAC Rule 3745-31-02(A) because the installation of P349 constituted a modification without first obtaining a permit to install from the director of the Ohio EPA.

Title V Operating Permits

- 7. On June 25, 1996, GM submitted its Title V permit application to the Ohio EPA. This permit application did not contain any information regarding the emission of Pb from the P349.
- 8. Based on the information contained in the Title V permit application submitted on June 25, 1996 and a subsequent renewal, the Ohio EPA issued a Title V permit to GM on November 4, 2004.
- 9. GM continuously violates Title V permitting requirements at Section 503 of the CAA, 40 C.F.R. Part 70, and OAC Rule 3745-77 because it has yet to submit a complete application for a Title V operating permit that identifies all applicable requirements, that accurately certifies compliance with such requirements, and that contains a compliance plan for all applicable requirements for which it is not in compliance (including the requirement to meet BACT pursuant to a new BACT determination under PSD, and the emission of Pb from P349). Furthermore, GM has yet to supplement and/or correct its June 25, 1996, Title V permit application with supplementary facts and corrected information regarding the requirement to meet BACT pursuant to a new BACT determination under PSD, and the emission of Pb from P349.

Ozone Depleting Substances

10. GM has thirteen refrigeration units at the facility with normal charges of over 50 lbs of class II refrigerant, R-22, including the following:

Industrial Process Refrigeration Units

- a. Air Cooled 70 Ton Serves West Core Room PLT 1 (104110A).
- b. Air Cooled 70 Ton Serves West Core Room PLT 1 (104110B)
- c. Chiller Above HB51-PLT1 (102449)
- d. Trane Unit PLT 1 (102450)

Comfort-Cooling Refrigeration Units

- e. Feco Chiller, water HB 71-84, 75 Ton (103284)
- f. Pattern Shop PLT1 (207105A)
- g. Pattern Shop PLT1 (207105B)
- h. Pattern Shop PLT1 (207106A)
- i. Pattern Shop PLT1 (207106B)
- j. Hourly Locker Room 2 West (220201)
- k. Hourly Locker Room 2 West (220202)
- 1. Training and Welding Room PLT1 (226078)
- m. Personnel East Dravo AC2 PLT1 (290071)
- 11. The refrigeration units referenced in Paragraph 10, above, are "appliances," as defined in 40 C.F.R. § 82.152, and use the class II refrigerant R-22.
- 12. GM's service records indicate that from July 1, 2001, to July 1, 2006, industrial process refrigeration unit 102449 experienced leaks that resulted in an annual leak rate exceeding 35 percent.
- 13. GM added 9 lbs of refrigerant to 102449 on March 12, 2002 and did not perform repairs that resulted in returning the annual leak rate to below 35 percent.
- 14. GM failed to perform initial verification tests to verify that the repairs it was required to perform on March 12, 2002 had brought the leak rates of 102449 to below 35 percent.
- 15. GM failed to perform follow-up verification tests to verify that the repairs it was required to perform on March 12, 2002 had brought the leak rates of 102449 to below 35 percent.
- 16. GM did not develop retrofit or retirement plans for 102449 when repairs it was required to perform on March 12, 2002 were unable to bring the leak rate to below 35 percent.
- 17. GM did not retrofit or retire 102449 within one year when repairs it was required to perform on March 12, 2002 were unable to bring the leak rate to below 35 percent.

- 18. GM did not notify U.S. EPA after failing to perform the follow-up verification tests to verify that the repairs it was required to perform on March 12, 2002 had brought the leak rates of 102449 to below 35 percent.
- 19. GM's service records indicate that from July 1, 2001 to July 1, 2006, comfort-cooling refrigeration unit 207106B experienced leaks that resulted in an annual leak rate exceeding 15 percent.
- 20. GM added 18 lbs of refrigerant to 207106B on May 6, 2002 and did not perform repairs that resulted in returning the annual leak rate to below 15 percent.
- 21. GM did not develop retrofit or retirement plans for 207106B when repairs it was required to perform on May 6, 2002 were unable to bring the leak rate to below 15 percent.
- 22. GM did not retrofit or retire 207106B within one year when repairs it was required to perform on May 6, 2002 were unable to bring the leak rate to below 15 percent.
- 23. GM's service records indicate that from July 1, 2001 to January 20, 2004, comfort-cooling refrigeration unit 103284 experienced leaks that resulted in an annual leak rate exceeding 15 percent.
- 24. GM added 5 lbs of refrigerant to 103284 on July 23, 2002 and did not perform repairs that resulted in returning the annual leak rate to below 15 percent.
- 25. GM did not develop retrofit or retirement plans for 103284 when repairs it was required to perform on July 23, 2002 were unable to bring the leak rate to below 15 percent.
- 26. GM did not retrofit or retire 103284 within one year when repairs it was required to perform on July 23, 2002 were unable to bring the leak rate to below 15 percent.

Environmental Impact of Violations

- 27. Violations of the standards for lead cause an increase in lead in the atmosphere. Lead accumulates in humans, damages organs and affects the nervous system. Infants and young children are especially sensitive to low levels of lead. It also harms animals and fish.
- 28. Violations of the standards for ozone-depleting substances lead to an increase in the depletion of stratospheric ozone ("the ozone layer"). The ozone layer protects humans as well as many plants and animals by filtering harmful ultraviolet radiation from the sun.

2/26/2007

Date

Stephen Rothblatt, Director Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-07-OH-07, by Certified Mail, Return Receipt Requested, to:

John A. Thomas Plant Manager **GMC** Powertrain Division 26427 State Route 281 East Defiance, OH 43512-0070

I also certify that I sent copies of the Finding of Violation and Notice of Violation by first class mail to:

Robert Hodanbosi, Chief Division of Air Pollution Control Ohio Environmental Protection Agency Lazarus Government Center P.O. 1049 Columbus, Ohio 43216-1049

and

Don Waltermeyer, APC Supervisor Northwest District Office Ohio Environmental Protection Agency 347 North Dunbridge Road Bowling Green, Ohio 43402

on the 8^{th} day of March, 2007.

AECAS, (MN/OH)

CERTIFIED MAIL RECEIPT NUMBER: 700/ 0320 6005 8919 2287